DOCKET NO.: RCOH-62USCON PATENT

Application No.: 10/719,963

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-35 (cancelled).

36. (currently amended) An image processing apparatus, comprising:

a reader module for inputting original image data including a pixel color value for each pixel represented by a first predetermined number of n bits in an original image, said reader module approximating the pixel color value into a second predetermined number of m bits while performing error diffusion so as to generate approximated color image data, the m bits being smaller than the n bits; and

a variable length encoder unit connected to said reader module for variably compressing the approximated color image data to generate further approximated color image data before transmitting the further approximated color image data;

a variable length decoder unit connected to said variable length encoder for variably decompressing the further approximated color image data back to the approximated color image data so that each pixel is represented by the m bits; and

an image processing/reproduction module connected to said reader module variable length decoder for processing the approximated color image data for performing a combination of image processing, intensity correction and color correction so as to generate processed approximated color image data, said image processing/reproduction module outputting a reproduced image based upon said processed approximated color image data.

37. (cancel)

38. (previously presented) The image processing apparatus according to claim 36 wherein said reader module performs dithering for the error diffusion.

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39. (previously presented) A method of image processing, comprising the steps of:

inputting original image data including a pixel color value for each pixel represented by a first predetermined number of n bits in an original image;

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approximating the pixel color value into a second predetermined number of m bits while performing error diffusion so as to generate approximated color image data, the m bits being smaller than the n bits;

variably compressing the approximated color image data to generate further

approximated color image data before transmitting the further approximated color image data;

transmitting the further approximated color image data from a first location to a second

receiving the further approximated color image data at the second location;

variably decompressing the further approximated color image data back to the approximated color image data so that each pixel is represented by the m bits:

processing the approximated color image data for performing a combination of image processing, intensity correction and color correction so as to generate processed approximated color image data; and

outputting a reproduced image based upon said processed approximated color image data.

40. (cancel)

location;

- 41. (currently amended) The method of image processing according to claim 36-39 wherein said approximating step performs dithering for the error diffusion.
- 42. (currently amended) An image processing system, comprising: a transmission side including;

a reader module for inputting original image data including a pixel color value for each pixel represented by a first predetermined number of n bits in an original image, said reader module approximating the pixel color value into a second predetermined number of m bits while

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performing error diffusion so as to generate approximated color image data, the m bits being smaller than the n bits;

a variable length encoder unit connected to said reader module for variably compressing the approximated color image data to generate further approximated color image data before transmitting the further approximated color image data; and

a reception side operationally connected to said transmission side including;

a variable length decoder unit for variably decompressing the further approximated color image data back to the approximated color image data so that each pixel is represented by the m bits; and

an image processing/reproduction module operationally connected to said reader module variable length decoder unit for processing the approximated color image data for performing a combination of image processing, intensity correction and color correction so as to generate processed approximated color image data, said image processing/reproduction module outputting a reproduced image based upon said processed approximated color image data.

43. (cancel)

44. (previously presented) The image processing system according to claim 42 wherein said reader module performs dithering for the error diffusion.

45. (new) The image processing apparatus according to claim 36 wherein the image processing includes a combination of enlargement, reduction, color conversion for each of a predetermined set of primary colors.

46. (new) The image processing apparatus according to claim 36 wherein the intensity correction is performed by a common gamma correction for all of a predetermined set of primary colors according to a conversion table.

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47. (new) The image processing apparatus according to claim 46 wherein the color correction is performed by a distinct correction for each of a predetermined set of primary colors according to

a conversion table.

48. (new) The image processing apparatus according to claim 47 wherein the conversion table is

a single common table.

49. (new) The method of image processing according to claim 39 wherein said image processing

includes a combination of enlargement, reduction, color conversion for each of a predetermined

set of primary colors.

50. (new) The method of image processing according to claim 39 wherein the intensity

correction is performed by a common gamma correction for all of a predetermined set of primary

colors according to a conversion table.

51. (new) The method of image processing according to claim 50 wherein the color correction is

performed by a distinct correction for each of a predetermined set of primary colors according to

a conversion table.

52. (new) The method of image processing according to claim 51 wherein the conversion table is

a single common table.

53. (new) The image processing system according to claim 42 wherein said image

processing/reproduction module performs a combination of enlargement, reduction, color

conversion for each of a predetermined set of primary colors.

54. (new) The image processing system according to claim 42 wherein said image

processing/reproduction module performs the intensity correction by a common gamma

correction for all of a predetermined set of primary colors according to a conversion table.

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55. (new) The image processing system according to claim 54 wherein said image processing/reproduction module performs the color correction by a distinct correction for each of a predetermined set of primary colors according to a conversion table.

56. (new) The image processing system according to claim 55 wherein the conversion table is a single common table.